



New Jersey Housing and Mortgage Finance Agency

*Special Needs Application
Design Checklist*

June 7, 2006

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Introduction

The New Jersey Housing and Mortgage Finance Agency (“Agency”) has a variety of Special Needs Programs for financing the development of service enriched housing for special needs populations. As a funder, the Agency has a vested interest in financing buildings that are high quality, energy and resource efficient, appropriate for the community, and designed with the end user’s special needs in mind. To this end, the Agency has developed a Design Checklist (“Checklist”). The Checklist will walk the applicant through a series of design issues that must be considered and addressed in order for the project to receive funding. All Special Needs Housing applicants must review the Checklist as part of the application and complete the Checklist prior to funding.

The Checklist has two primary purposes:

- To familiarize the applicant with the Agency’s design considerations and to have the applicant commit to incorporating these considerations into the design process.
- To provide a basis for plan and specification review by the Agency and a starting point for design dialogue with the applicant.

Contents

The Checklist is divided into three substantive parts followed by a reference guide. The reference guide is intended to help clarify the meaning of each design consideration included in the Checklist. Developers should review the reference guide prior to completing the application and Checklist as a means to better understand the Agency’s intent for each individual design consideration.

- I. User Needs – Reviewing the special needs of the residents and the implications for the physical design of the housing to support recovery, wellness and community integration.
- II. Sustainability – Examining green building considerations including energy efficiency, durability, operations, maintenance, resource conservation, and indoor air quality.
- III. Design Excellence – Reviewing key attributes of a well-designed housing project including parking, open space, landscaping, and building location, shape, appearance and layout.

Completing the Checklist

The Checklist is to be used in two ways:

- 1) All applicants applying for financing through any of the Agency’s Special Needs Programs must review the Checklist and commit in the appropriate section of the

application to using the Checklist when designing their housing project. Applicants should share the Checklist with their design professionals as early as possible to ensure that the design considerations are incorporated in the project plans and specifications.

- 2) All applicants will need to complete the Checklist prior to a housing project receiving Special Needs Program funding. Agency staff is available to meet with the applicant's design professionals to review plans, specifications and design related Checklist items. Each item in the Checklist will require one of four responses:
 - a. In the Plan – Applicant will indicate where in the site or building plan the issue is addressed.
 - b. In the Specifications – Applicant will indicate where in the building specifications the issue is addressed.
 - c. Narrative – Applicant will provide a narrative description of how the issue is being addressed, if it is not clear in the plans or specifications.
 - d. Not Applicable – Applicant will explain why the design issue is not applicable or is not being addressed.

Cost Implications

Most of the elements included in this Checklist will not require additional costs. However, some items are above and beyond a typical building scope of work and may require additional expense. Design aspects that are deemed appropriate and reasonable by the Agency that may increase the overall development budget will be considered eligible costs and funded by the Agency. Applications that maximize the good design considerations embodied in the Checklist will be a priority for Agency funding.

More Information

The Special Needs Application and the Design Checklist can be found at <http://www.state.nj.us/dca/hmfa/consu/special/>. The attached reference guide contains a wealth of technical information as well as professional contact information. Please refer to this information. For questions regarding items in the Checklist, please contact Pamela DeLosSantos, NJHMFA Technical Services Division, at 609-278-7627.

The Agency acknowledges the technical assistance provided by the New Jersey Institute of Technology, Center for Architecture and Building Science Research in developing and implementing the Checklist.

Special Needs Application Design Checklist

I. USER NEEDS CHECKLIST

Everyone wants and deserves housing that is safe, comfortable, offers privacy and supports recovery, wellness and community integration. Housing developed with consideration of “user needs” will assist residents/tenants to function at the peak of their abilities. However, the provision of these basic housing elements for persons with special needs can present a challenge. A primary characteristic of many special needs populations is the difficulties they encounter when coping with the environmental stressors and/or barriers that are typically present in traditional residential settings. Challenges from mental, physical, and intellectual disabilities may make special needs groups more vulnerable to impact from the environment.

The best practice in design considers the fit between the individual on his or her environment. The following design guidelines focus on issues to be considered when planning housing for persons with special needs.

General Issues

Special Needs

- ☐ **UN.1** Identify the target population of the project.

- ☐ **UN.2** Identify the unique needs of the target population that should be considered in the design of the building(s).

Site and Building Issues to Consider

Safety/Security

- ☐ **UN.3** Design the site and the building entries and exits to make it easy to monitor and control who comes into the building and that “fits” into the neighborhood.

- ☐ **UN.4** Design buildings to screen visitors before they get into the building. Provide a place where visitors, who have been screened, can wait for residents/tenants without entering the building.

☐ **UN.5** Provide security systems that are highly visible to both residents/tenants and anyone who approaches or comes into the building. Use high profile security serves as a deterrent to inappropriate use of the building, theft, and threats to personal safety and security, and that support staffs ability to monitor the building.

☐ **UN.6** Provide for outdoor space that is protected from the street and easily monitored.

☐ **UN.7** Blend building scale and design in as seamlessly as possible with the surrounding buildings.

☐ **UN.8** Preserve original design elements (to the extent feasible) in architecturally interesting or historically significant buildings.

Community access

☐ **UN.9** Provide for easy access to commercial facilities, shopping, grocery stores and restaurants.

☐ **UN.10** Provide access to recreational and social activities, library, and parks.

☐ **UN.11** Provide access to medical facilities.

☐ **UN.12** Provide access to houses of worship.

☐ **UN.13** Provide access to public transportation.

☐ **UN.14** Provide access to employment opportunities.

Accessibility

☐ **UN.15** Design for an accessible building site and neighborhood. (FE: Is there a ramp, if there are stairs – how many?)

☐ **UN.16** Design accessible entries. (If the project will serve persons with physical disabilities are all floors and common space accessible?)

☐ **UN.17** Provide accessible common spaces and dwelling units throughout the facility.

☐ **UN.18** Design for Interaction/Visiting/ Activity Areas.

☐ **UN.19** Plan for separate spaces that allow for quiet activities (i.e., reading and computer) and noisy/social ones (television, music, pool, ping pong, etc.). Multi-use space can lead to conflict.

☐ **UN.20** Provide space (or series of adjoining spaces) large enough for a residents/tenants social event or meeting.

☐ **UN.21** Determine if smoking is to be allowed in the building or on the grounds. If yes, appropriate ventilation and protection measures should be considered. Shared living space should be smoke-free. If smoking is prohibited in the building is there a designated area outside the building for smoking?

Dwelling Unit Issues to Consider:

Personal Control

☐ **UN.22** Create residents/tenants ability to regulate the ambient qualities of personal environments (HVAC)

☐ **UN.23** Provide residents/tenants opportunities to control the amount of light and noise that come into dwelling units.

☐ **UN.24** Design for adequate sound insulation between units, between units and the street, and between units and social spaces so residents/tenants can create peaceful environments in their dwellings.

Kitchen, Food Storage and Preparation

☐ **UN.25** Provide design elements that make it easy to store perishable food, such as an adequately sized refrigerator and freezer.

☐ **UN.26** Build adequate storage space for dry foods (cabinets) and cooking/eating utensils (cabinets and drawers).

☐ **UN.27** Plan kitchen design that provides adequate space for residents/tenants to prepare meals, such as a sufficient amount of counter space and a sink large enough for food preparation and clean up.

☐ **UN.28** Provide adequate cooking appliances, including stove, oven, cook top, and microwave.

- ☐ **UN.29** Provide adequate exhaust ventilation to eliminate cooking odors.
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- ☐ **UN.30** Specify cooking appliances that are consumer friendly, safe and easy to use:
- Electric burners that remain red as long as they are hot
 - Clearly defined burner edges
 - Controls that are clearly labeled and can be turned on with one hand.
 - Controls that can be regulated without reaching over the cook top
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Maintaining the Household

- ☐ **UN.31** Select finishes that are easy to keep clean:
- Flooring that is easy to mop and does not show the dirt
 - Backsplashes behind cooking areas that are easy to wipe down
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- ☐ **UN.32** Design for adequate storage for supplies and belongings to minimize clutter and maximize access.
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- ☐ **UN.33** Specify window treatments that are easy to maintain and provide privacy.
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Maintaining Personal Hygiene

- ☐ **UN.34** Design safe and accessible bathrooms.
- Plumbing fixtures that are easy to understand and use
 - Faucets that can be operated with one hand (lever or single blade lever handles)
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- ☐ **UN.35** Ensure that faucets clearly indicate the hot and cold regions.
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☐ **UN.36** Specify easy to flush toilets with sufficient water pressure to empty with one flush.

☐ **UN.37** Specify shower and or bathtub keeping in mind the needs of the resident population.

☐ **UN.38** Ensure there is a good exhaust system for venting bathroom odors.

Provision of Personal Space

☐ **UN.39** Ensure a design of individual apartments and individual living units that promote a sense of personal, identifiable (‘My’) space and territory.

Offer Adequate Space

☐ **UN.40** Provide living units that offer adequate size for the residents/tenants. (Indicate square footage for bedroom and individual units.)

☐ **UN.41** Design for visual separation of cooking area from living/sleeping area.

☐ **UN.42** Supply adequate storage/closet space.

☐ **UN.43** Plan for built-ins that can free-up floor space.

Provide Privacy Options

- ☐ **UN.44** Provide adequate options for visual privacy in personal units and in the common areas

- ☐ **UN.45** Maintain auditory privacy through good acoustical treatment between dwelling units and rooms in the common areas.

- ☐ **UN.46** Select finishes and furnishings that do not trigger hallucinations and optical delusions:
- severely defined wood grains
 - laminates with ominous or illusion inducing patterns
 - floor patterns that create illusion of movement
 - flooring and furniture finishes that reflect excessive glare

- ☐ **UN.47** Ensure residents/tenants ability to regulate noise, light, and other environmental stimuli with the potential to induce psychological stress.

- ☐ **UN.48** Provide for residents/tenants control of HVAC

- ☐ **UN.49** Allow tenants ability to protect self from direct sunlight, if necessary.

Design for Active Living

- ☐ **UN.50** Provide opportunities for walking/biking and other outdoor activities in the neighborhood.

- ☐ **UN.51** Design for opportunities for physical exercise in the building.

- ☐ **UN.52** Provide outside opportunities for on-site exercise

- flower gardens,
 - basketball hoop, shuffleboard, kick ball wall
 - lawn maintenance
 - children’s playground (if appropriate), etc.
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For Persons with Intellectual Disabilities

☐ **UN.53** Control units, appliances and fixtures should be uncomplicated to use and present a minimum number of options. Controls should be easy to read with both large printed directions and visual graphics

☐ **UN.54** Ensure that sink and shower fixtures are easy to use and clearly indicate how water temperature is regulated. Again, directions should have printed (hot, cold) and visual (blue, red) cues.

☐ **UN.55** Specify environmental control units that are accessible and comprehensible, such as easy-to-read and operate thermostats or individual heating and air conditioning controls.

For Shared Living and Community Residences

☐ **UN.56** Design kitchens and other common areas that can be used simultaneously by more than one person at a time.

☐ **UN.57** Provide private space for visitors.

☐ **UN.58** Design for separate bedrooms that provide privacy from shared livings areas.

☐ **UN.59** Ensure that each individual has their own bathroom. If not, minimize the number of people that share a bathroom.

- ☐ **UN.60** When more than one resident will share a dwelling, design of the unit should:
- Allow more than one person to work in the kitchen or laundry area simultaneously
 - Provide residents with separate spaces for storing their groceries, dishes, utensils, cook ware, etc.
 - Provide residents/tenants with individual storage space for personal belongings.
 - Provide more than one common area so residents/tenants can pursue different activities at the same time (television, videos, music, cards and games, etc.).
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II. SUSTAINABILITY CHECKLIST

Organizations that apply for HMFA funding for Special Needs populations must consider the features listed below to ensure the sustainable design, construction and operation of their developments.

These considerations are derived from the New Jersey Green Homes Office “New Jersey Affordable Green” (NJAG) program requirements. When prioritizing considerations, they may become more or less important based on the different special needs populations. The entire NJAG “Green Feature Matrix” and “Reference Guide” can be obtained from the New Jersey Department of Community Affairs’ Green Homes Office, along with information on the various incentives that are available for many of these features.

(NOTE: The numbers listed in parentheses after each feature are the reference numbers in the NJAG Green Feature Matrix).

Site & Land Use

Outdoors

☐ **S.1** Develop a plan for preserving existing trees, vegetation and street trees (if applicable). (SL-5)

☐ **S.2** Develop site to optimize passive solar gain. (SL-6)

☐ **S.3** Access to daylighting and view for every unit. (IA-34)

Indoor Air Quality

Construction Quality Management

☐ **S.4** Protect ducts and HVAC system from dust during construction. (IA-3)

Materials and Product Choices

- ☐ **S.5** Power vent or provide sealed combustion for all combustion devices.(IA-7)

- ☐ **S.6** Use low VOC paints for interior finishes. (IA-8)

- ☐ **S.7** Use low VOC paints for all interior sealants and adhesives. (IA-9)

- ☐ **S.8** Encapsulate any non-UF-free particleboard in cabinets. (IA-10)

- ☐ **S.9** Use urea-formaldehyde-free insulation. (IA-11)

Flooring

- ☐ **S.10** Use the Carpet and Rug Institute’s Green-Label Plus, low-pile carpet, with 20% recycled content. (IA-14)

- ☐ **S.11** Use carpet tile with recycled backing and facing (IA-14a)

- ☐ **S.12** Use durable, healthy flooring in dining/living rooms, kitchens, baths, corridors and entries (IA-15)

- ☐ **S.13** Use durable kitchen, bath and entry flooring tile (IA-15a)

- ☐ **S.14** Use durable kitchen and entry flooring linoleum. (IA-15b)

- ☐ **S.15** Use low-VOC carpet adhesives. (IA-16)

- ☐ **S.16** Tack down carpet instead of glue-down (IA-18)

Ventilation and Moisture Management

- ☐ **S.17** Use medium-efficiency (or higher) air filters in ducted forced air systems. (IA-22)

- ☐ **S.18** Provide automatic ventilation to each occupied room. (IA-24)

Proper Handling and Avoidance of Toxics

- ☐ **S.19** Use non-mercury appliances. (IA-27)

- ☐ **S.20** Use encapsulated insulation batts in basement ceilings. (IA-28)

- ☐ **S.21** Landscape for integrated pest management, to avoid pesticides. (IA-30)

Energy Efficiency

Building Envelope and HVAC

- ☐ **S.22** Ensure all units are Energy Star rated. (EE-1)

☐ **S.23** Provide mercury-free thermostats. (EE-2)

☐ **S.24** Provide easy-to-use programmable thermostats and provide occupant training. (EE-3)

☐ **S.25** Size equipment within 20% of Manual J load calculation. (EE-4)

☐ **S.26** Provide high-energy factor water heater(s) beyond Energy Star requirements. (EE-5)

☐ **S.27** Run all ductwork, except duct plenums, in conditioned space. (EE-6)

Lighting

☐ **S.28** Provide a minimum of one Energy Star lighting fixture per room and all provide Energy Star fixtures for all outdoor lighting. (EE-9)

☐ **S.29** Provide daylight-sensor controls to turn off unneeded interior lights. (EE-20)

☐ **S.30** Provide lighting with automated occupancy controls in common spaces except for hallways and stairwells. (EE-21)

Appliances

- ☐ **S.31** Provide Energy Star refrigerators, clothes washers and dishwashers. (EE-23, 24, 25)
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Resource Efficiency

Job-Site Operations

- ☐ **S.32** Include a construction waste management plan in the specifications to ensure that all appropriate concrete, metals, woods, recyclable plastic bottles and cardboard from the construction and demolition waste is recycled. (RE-1)
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- ☐ **S.33** Recycle or salvage construction and demolition debris. (RE-2)
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Building Envelope

- ☐ **S.34** Use EEBA window and flashing details. (RE-3)
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- ☐ **S.35** Specify 50-year or more durable siding; e.g. fiber cement. (RE-4)
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Landscaping, Pavement & Stormwater

- ☐ **S.36** Use only native and/or drought-tolerant plants. (RE-9)
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- ☐ **S.37** Use high efficiency irrigation. (RE-10)
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- ☐ **S.38** Use rainwater collection for irrigation. (RE-11)
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☐ **S.39** Use pervious pavers for outdoor patios and walkways. (RE-12)

☐ **S.40** Use porous pavers for roads and parking. (RE-13)

Recycling

☐ **S.41** Provide onsite-recycling centers located in exterior common areas. (RE-26)

☐ **S.42** Provide recycling areas and containers in or near each kitchen. (RE-27)

Operations & Maintenance

Education

☐ **S.43** Provide owner with O&M manual and training for ownership units. (OM-1)

☐ **S.44** Train residents/tenants to use programmable thermostats. (OM-2)

III. DESIGN EXCELLENCE CHECKLIST

The following Checklist was created to ensure that key issues with the most direct impact on overall design quality are addressed at the earliest stages of the development process. The considerations are presented in summary form below and are described in more detail in [Section 2](#) of this Guidelines Supplement.

Each consideration is important to achieving design excellence and to create a housing development that meets the needs of its users, understands and responds to its context, enhances its neighborhood and is built to last. Further information on each consideration can be found in the *Special Needs Application Design Checklist Reference Guide*.

Parking Considerations

- ☐ **D.1** Design for parking that does not dominate the site, the building or the street.

- ☐ **D.2** Design to minimize the overall impact of the garages, driveways and parking areas.

- ☐ **D.3** Provide easy access to all parking spots and provide multiple opportunities for surveillance of the parking area(s).

- ☐ **D.4** Design to minimize vehicle/pedestrian interaction.

- ☐ **D.5** Design to maximize the security of the parking area(s).

Public Open Space Considerations

- ☐ **D.6** Design public open areas to the same level of quality as any other “space” in the development.

- ☐ **D.7** Design public open spaces as if they were outdoor rooms.

☐ **D.8** Provide clear boundaries between public, community and privately controlled spaces.

☐ **D.9** Provide visual access to shared open spaces from individual dwelling units to facilitate surveillance of these spaces.

Landscaping

Landscaping can make or break a development.

☐ **D.10** Design so that landscaping is never a secondary consideration.

☐ **D.11** Provide as rich a variety of plantings as possible.

☐ **D.12** Design all paved areas to work with the landscaping.

☐ **D.13** Give design attention to the edges where planted areas and hard surfaces meet.

☐ **D.14** Design any outdoor seating provided as an integral part of the landscape plan.

☐ **D.15** Design all paths as integral parts of the landscape plan.

☐ **D.16** Provide adequate storage for landscape maintenance materials and equipment.

Building Location

- ☐ **D.17** Design the building to respect its street, enhance its site and respond to its climate.

- ☐ **D.18** Ensure that the site entry is clearly delineated.

- ☐ **D.19** Maintain existing setback patterns within the immediate vicinity of the building.

- ☐ **D.20** Design to take maximum advantage of the climate, especially solar access and natural ventilation.

- ☐ **D.21** Provide accessible common spaces and dwelling units

Building Shape

A building should reinforce the physical “fabric” of the surrounding neighborhood.

- ☐ **D.22** Relate the overall height of the new structure(s) to the heights of adjacent structures and/or of buildings in the immediate neighborhood.

- ☐ **D.23** Relate the scale and massing of the new structure(s) to the prevalent scale of buildings in the immediate neighborhood.

- ☐ **D.24** Consider utilizing a variety of building forms and roof shapes, rather than box-like forms with large, unvaried roofs.

Building Appearance

A building should look good to residents/tenants and neighbors.

☐ **D.25** Consider a building image that fits in with the image of housing in the community where the project is located.

☐ **D.26** Provide as much architectural and visual complexity as possible to the building's appearance.

☐ **D.27** Maximize (within budget constraints) the number and size of windows to enhance views and make spaces feel larger

☐ **D.28** Relate the character of the new building facade to the facades of similar, good quality buildings in the surrounding neighborhood or region.

☐ **D.29** Relate the roof shape(s) of the new building to those found in similar, good quality buildings in the surrounding neighborhood or region.

☐ **D.30** Respect the size and rhythm of openings – particularly on the street facades – of similar, good quality buildings in the neighborhood or surrounding area.

☐ **D.31** Pay careful design attention to trim and details, particularly on the street facades of the building.

☐ **D.32** Use materials and colors for the facade (including foundation walls) and roofing that are compatible with those in similar, good quality buildings in the surrounding neighborhood or region.

Building Layout

A building should “work” for residents, staff and visitors.

☐ **D.33** Pay careful design attention to entries with respect to issues of shelter, security, lighting, durability, and identity.

☐ **D.34** Attempt to locate facilities and common rooms centrally, and ensure that they are comfortable, accessible, durable and flexible.

☐ **D.35** Carefully consider the design and location of key support and service areas: manager’s office, maintenance rooms, janitor’s facilities, mechanical equipment rooms and trash collection areas.

☐ **D.36** Treat ramps and stairs, especially entry ramps and stairs, as major design elements and integrate accessible building entrances into the design

☐ **D.37** Pay attention to the location of elevators and to the design of the space in front of them.

☐ **D.38** Pay attention to the design of access corridors and avoid corridors that are excessively long.

☐ **D.39** Consider ways to maximize the security by design.

NOTE: The Board of Public Utilities Clean Energy Program offers programs, incentives, and rebates for energy efficiency and renewable energy. Details about these incentives, along with access to detailed information about federal tax credits for energy efficiency and renewable energy can be found at: <http://www.njcleanenergy.com/>.